MAY 2 9 2001

RECEIVED

selected from the group consisting of

JUN 0 8 2001

Gly Arg and Arg Gly Arg.

**TECH CENTER 1600 2900** 

- 27. A lipopeptide of claim 23 wherein at least one of the spacers is at least one member of the group consisting of at lest one glutamic acid and at least one aspartic acid.
- 28. A lipopeptide of claim 23 wherein the spacers are comprised of a cysteine or alkyl functionalized by a thiol and non-peptide bonds.
- 29. A lipopeptide of claim 23 wherein the spacers are selected from the group consisting of thiazolidine, oxime or hydrazone.
- 30. A lipopeptide of claim 23 comprised of a lipid a first spacer an auxiliary T epitope a second spacer a CTL epitope.
- 31. A lipopeptide of claim 23 comprised of a lipid a first spacer auxiliary T epitope a second spacer a first CTL epitope a second CTL epitope.
- 32. A lipopeptide of claim 23 wherein the lipid is at least one unbranched or branched, unsaturated or saturated chain derived from a member selected from the group consisting of fatty acids of 10 to 20 carbon atoms, fatty alcohols of 10 to 20 carbon atoms and steroids.
- 33. A lipopeptide of claim 23 wherein the lipid is comprised of at least two chains derived from fatty acids or fatty alcohols of 10 to 20 carbon atoms bonded by at least one amino acid.
- 34. A lipopeptide of claim 23 wherein the lipid is two palmitic acids linked to NH, group of a lysine.

- 35. A lipopeptide of claim 23 wherein the lipid is a moiety selected from the group consisting of palmitic acid, oleic acid, linoleic acid, 2-amino hexadecanoic acid, pimelautide and trimeautide.
- 36. A lipopeptide of claim 23 wherein the non-lipid portion is comprised of 15 to 100 amino acids.
- 37. A lipopeptide of claim 23 wherein the auxiliary T epitope is a multivalent epitope.
- 38. A lipopeptide of claim 23 wherein the auxiliary T epitope is the 830-843 peptide of tetanic toxin with the sequence QYIKANSKFIGITE.
- 39. A lipopeptide of claim 23 wherein the auxiliary T epitope is haemagglutinin epitope or PADRE epitope.
- 40. A lipopeptide of claim 23 having at least one CTL epitope of a protein specific for a member selected from the group consisting of melanoma, a HIV protein, papillomavirus, protein p-53 from the intrahepatocytary stadium of <u>Plasmodium falciparum</u>.
- 41. A method of inducing a specific immune response in a warm-blooded animal comprising administering to a warm-blooded animal an amount of a lipopeptide of claim 23 sufficient to induce a specific immune response.
- 42. A method of inducing an immune response against a member of the group consisting of HIV, VBH, papillomavirus, the melanoma p-53 and malaria comprising administering to a warm-blooded animal in need thereof an effective amount of a lipopeptide of claim 23 to induce said immune response.